U.S. Appln. No.: 10/662,825

REMARKS

Upon entry of the Amendment, Claims 1-20 will be pending in the application.

Claim 1 is amended to recite "wherein the biochemical analysis unit utilizes a chemical luminescence technique." Support can be found, for example, in the Examples and at page 37, lines 9-11 of the specification.

Claims 7-20 are added. Claims 7-8 find support, for example, at page 11-25.

Claim 9 finds support, for example, at page 16, lines 2-3.

Claim 10 finds support, for example, at page 16, lines 4-5.

Claim 11 finds support, for example, at page 16, lines 17-19.

Claims 12-13 find support, for example, at page 16, line 20 to page 17, line 2.

Claim 14 finds support, for example, at page 17, lines 3-6.

Claim 15 finds support, for example, at page 17, lines 6-8.

Claim 16 finds support, for example, at page 17, lines 9-16.

Claim 17 finds support, for example, at page 20, lines 18-24.

Claims 18-20 find support, for example, at page 36, Table 1.

No new matter is added.

Entry of the Amendment along with reconsideration and review of the claims on the merits are respectfully requested.

Response to Claim Rejections - 35 U.S.C. § 102

U.S. Appln. No.: 10/662,825

- A. Claims 1-6 are rejected under 35 U.S.C. §102(b) as assertedly being anticipated by Neriishi (U.S. Publication 2002/0197568), for the reasons given in the Office Action.
- B. Claims 1, 3, and 5 are rejected under 35 U.S.C. §102(e) as assertedly being anticipated by Hosoi (U.S. Patent No. 6,872,531), for the reasons given in the Office Action.

Applicant responds as follows.

Claim 1 is amended to clarify that the present invention relates to a biochemical analysis unit which utilizes a chemical luminescence technique.

First, Applicant points out that Neriishi is not a reference under 35 U.S.C. §102(b). Specifically, Neriishi's publication date of December 26, 2002, is not more than one year from the Applicant's U.S. filing date of September 16, 2003. Thus, Neriishi cannot be applied as a reference under 35 U.S.C. §102(b). Instead Neriishi can only be applied under 35 U.S.C. §102(e) and 35 U.S.C. §102(a).

Applicant traverses the anticipation rejections based on distinctions between the present invention of independent Claim 1 and the disclosures of each of Neriishi and Hosoi. Applicant submits that neither Neriishi nor Hosoi disclose a biochemical analysis unit which utilizes a chemical luminescence technique according to the present invention.

With respect to Claims 1, 3, and 5, the Examiner cites Neriishi as disclosing a biochemical analysis unit comprising a base plate which has a plurality of holes (see Figures 1-2), where the base plate is constructed from any material that has radiation attenuating properties and/or light attenuating properties, and where a porous adsorptive material is filled in each of the plurality of holes in order to form a plurality of adsorptive regions. The Examiner further cites

U.S. Appln. No.: 10/662,825

Neriishi as disclosing that each pore in the adsorptive material has a diameter falling within the range of 0.1 to 50 µm. However, Neriishi fails to disclose at least a chemical luminescence technique.

The Examiner cites Hosoi as disclosing a biochemical analysis unit comprising a base plate (see Figure 1) made from metal, plastic, or ceramic materials that does not transmit radiation and having a plurality of holes containing a porous adsorptive material which forms a plurality of adsorptive regions. Each of the pores in the adsorptive material has a diameter falling within the range of 0.1 to 50 µm. However, Hosoi fails to disclose at least a chemical luminescence technique.

In the field of chemical luminescence, which is the use for the biochemical analysis unit of the present application, it is very important to reduce background noise. Therefore, it is necessary, in the chemical luminescence technique, that the pore diameter is within a specific numerical range to achieve a high signal-to-noise ratio in detection.

The Examiner pointed out in the Office Action that Neriishi and Hosoi disclose that the pores in the absorptive material each have a diameter falling within the range of 0.1 to 50 µm. However, in Neriishi and Hosoi, these values are described merely as examples, and have no technical meanings.

Further, it would not be possible to achieve a high signal-to-noise ratio in detection within all the area of such a wide range for the diameter of the pores, namely 0.1 to 50 µm. This means that the specific range of diameter according to the present invention is significant and thus would also not have been obvious from the respective ranges taught by Neriishi and Hosoi.

rejections under 35 U.S.C. § 102.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the

Response to Claim Rejection - 35 U.S.C. § 103

Claims 1, 3, and 5 are rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over Nagasawa (U.S. Publication 2002/0127585) in view of Maul (U.S. Patent No. 5,955,377) and Beattie (U.S. Patent No. 5,843,767), for the reasons given in the Office Action.

Applicant responds as follows.

Claim 1 is amended to clarify that the present invention relates to a biochemical analysis unit which utilizes a chemical luminescence technique.

The combination of Nagasawa in view of Maul and Beattie fails to render obvious the present invention. Applicant submits that Nagasawa, Maul and Beattie fail to disclose a biochemical analysis unit which utilizes a chemical luminescence technique according to the present invention.

Further, although the Examiner pointed out that Beattie discloses that the available surface area of pore arrays is increased if the diameter of each pore is small, in the cited part of the specification, Beattie merely discloses that the increase of the surface area increases the amount of nucleic acids bound thereto and, consequently, the detection sensitivity is improved. Therefore, those skilled in the art would not have conceived of the present invention, in which the lower limit of the pore diameter of the absorptive material is set.

Thus, the combination of references would not achieve the present invention.

Atty. Docket No. Q77478

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Appln. No.: 10/662,825

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the

rejection under 35 U.S.C. § 103(a).

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 48,409

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: April 4, 2006

10